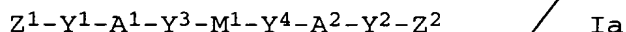


Liquid-crystalline composition

Abstract

The present invention relates to a liquid-crystalline composition which comprises, as components

- 10 A) a liquid-crystalline mixture comprising as least one compound selected from the group consisting of the compounds of the formula Ia



- 15 and of the formula Ib



- 20 where the variables, independently of one another, have the following meanings: P is hydrogen, C₁-C₁₅-alkyl or a -Y⁸-A⁴-Y⁶-Z⁴ group, Z¹ to Z⁴ are polymerizable groups, Y¹ to Y⁸ are linking groups, A¹ to A⁴ are spacers and M¹ and M² are mesogenic groups,

- 25 B) if desired, further additives selected from the group consisting of photoinitiators, reactive thinners and diluents,
- 30 C) if desired, further additives taken from the group consisting of antifoams and deaerators, lubricants and flow auxiliaries, thermally curing or radiation-curing auxiliaries, substrate wetting auxiliaries, wetting and dispersion auxiliaries, hydrophobicizing agents, adhesion promoters and auxiliaries for improving the scratch resistance,
- 35 D) if desired, further additives selected from the group consisting of dyes and pigments, and
- 40 E) if desired, further additives selected from the group consisting of light, heat and/or oxidation stabilizers.

A detailed definition of the variables Z¹ to Z⁴, Y¹ to Y⁸, A¹ to A⁴, P, M¹ and M² is given in the description.

- 45 The present invention furthermore relates to the use of a liquid-crystalline composition of this type as a printing ink, for printing or coating substrates, in electro-optical

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components, for counterfeiting-proof marking of articles and for the production of films or coatings which selectively reflect light in the wavelength range from 250 to 1300 nm, to a polymer or polymerized film obtained by polymerizing a liquid-crystalline composition according to the current invention and to the use of a polymerized film of this type as an optical filter, polarizer, decoration, counterfeiting-proof marking or reflection medium for the selective reflection of radiation in the wavelength range of 250 to 1300 nm, to a process for printing or coating the substrate using a liquid-crystalline composition according to the invention, and to substrates to which a liquid-crystalline composition according to the invention or a polymer or polymerized film according to the invention has been applied or which has been printed or coated by the process according to the invention.

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